

## We claim:

 A computer-aided method for managing an insurance reserve requirement by segmenting risk components in a reinsurance transaction, the method including the steps of: controlling performance of a computer system with control means in carrying out the steps of:

calculating an insurance reserve requirement from data; and segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components; and

carrying out the reinsurance transaction by steps including:

allocating the components to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement; and assigning assets for the reserve requirement to a reinsurance asset trust to receive reinsurance credit for said reserve requirement.

- 2. The method of claim 1, wherein said reinsurance transaction provides reinsurance for life insurance, and further including the step of associating data corresponding to the life insurance with the reinsurance transaction.
- The method of claim 2, wherein said step of segmenting includes: selecting said insured contingency risk from a group including mortality risk, morbidity risk, and survivorship risk.
  - 4. The method of claim 2, wherein said step of calculating includes: calculating a statutory reserve requirement; calculating an economic reserve requirement; and calculating an excess of the statutory over the economic reserve requirement.
- 5. The method of claim 2, wherein said step of segmenting includes: calculating a capital requirement corresponding to an economic reserve; and calculating a capital requirement corresponding to an excess of the statutory reserve over the economic reserve.

6. The method of any one of claims 1-2, wherein the step of allocating the components to different parties includes:

allocating the capital requirement to at least one of the parties from a group including a bank, a syndicate, a pension plan, another securities lender, or an investor through the purchase of some of any traunche of a trust funding financial instrument, and further including the steps of:

associating data corresponding to said source of an asset with the reinsurance transaction; and for each of a plurality of time periods:

calculating the reserve requirement and the capital requirement; and making an asset adjustment corresponding to the asset in the reinsurance asset trust.

7. The method of claim 1, wherein the step of allocating the components to different parties includes funding the capital requirement by issuing a security into the capital market, and further including the steps of:

associating data corresponding to said security with the reinsurance transaction; and for each of a plurality of time periods:

calculating the reserve requirement and the capital requirement; and making an asset adjustment corresponding to the asset in the reinsurance asset trust.

- 8. The method of claim 7, wherein said step of issuing said security into the capital market includes issuing a Funding Agreement.
- 9. The method of claim 7, wherein said step of issuing said security into the capital market includes issuing a Capital Redemption Bond.
- 10. The method of claim 7, wherein said step of issuing said security into the capital market includes issuing a Guaranteed Investment Contract.
- 11. The method of any one of claims 8-10, further including the step of computeraided managing said security consistent with investment guidelines such that the asset held for said insured contingency risk qualifies as an admitted asset in a jurisdiction of the contingency risk.

- 12. The method of any one of claims 8-10, further including the step of associating data corresponding to said security with a corresponding asset from a group including an investment grade bond, a Collateralized Mortgage Obligation, Mortgage Backed Security, real estate, and an equity.
- 13. The method of any one of claims 8-10, further including the step of computeraided managing said reinsurance asset trust consistent with terms of the trust.
- 14. The method of claim 11, further including the step of computer-aided managing said reinsurance asset trust consistent with terms of the trust.
- 15. The method of any one of claims 1-2, wherein the step of allocating the components to different parties, includes allocating said insured contingency risk to at least one of the parties from a group including a reinsurer, a reinsurance pool, a retrocessionaire, a retrocession pool, or another insurance risk assumer, and further including the steps of:

associating data corresponding to a provider of insurance coverage for said insured contingency risk with the reinsurance transaction; and for each of a plurality of time periods: calculating the reserve requirement and the insured contingency risk; and making an adjustment to the insurance risk coverage.

- 16. The method of any one of claims 1-2, further including the step of managing, for a reinsurance company, to accommodate change in the insured contingency risk and change in the capital requirement.
- 17. The method of any one of claims 7-10, further including, for said for said reinsurance asset trust, calculating a value of said asset on a legally required filing date of a financial statement for said reserve requirement.
- 18. The method of any one of claims 1-2, further including, for each of a plurality of time periods, the steps of:

calculating reserve requirement using emerging experience data; and recalculating corresponding values for said insured contingency risk and said capital requirement.

19. The method of any one of claims 1-2, further including, for each of a plurality of time periods, the steps of:

valuing traunches for financial instrument funding of said reinsurance asset trust; calculating relative proportion of each said traunche; and making a corresponding asset adjustment corresponding to said asset of said trust.

20. The method of any one of claims 1-2, further including, for each of a plurality of time periods, the steps of:

generating a report by inserting datum produced in one of said method steps into the report, said datum from a group including said reserve requirement, said insured contingency risk, said corresponding capital requirement, and a value of said asset; and printing the report.

- 21. The method of any one of claims 1-2, further including the steps of:
  generating a contract by inserting datum produced in one of said method steps into the
  contract for said reinsurance transaction to one of the parties from a group including an
  insurance company, a risk carrier and a source of asset; and
  printing the contract.
- 22. The method of any one of claims 1-2, further including, for each of a plurality of time periods, the step of:

performing a valuation and pricing said insurance contingency risk and said corresponding capital requirement.

23. The method of claim 22, further including the steps of:
computer-aided managing said reinsurance transaction for a reinsurance company
providing collateral for said economic reserve requirement,

said excess reserve requirement funded by one of the parties from a group including a bank, a syndicate, a pension plan, a securities lender, or an investor through the purchase of any portion of any traunche of a trust funding financial instrument; and

further including the step of associating data corresponding to said source of said asset with said reinsurance company.

24. The method of claim 2, wherein the step of allocating the components to different parties further includes funding the capital requirement by issuing a security into the capital market, and further including the step of associating said security with the reinsurance transaction; and for each of a plurality of time periods:

calculating the reserve requirement and the capital requirement; and making an asset adjustment corresponding to the asset in the reinsurance asset trust.

- 25. The method of claim 24, wherein said issuing said security into the capital market includes issuing a Funding Agreement.
- 26. The method of claim 24, wherein said issuing said security into the capital market includes issuing a Capital Redemption Bond.
- 27. The method of claim 24, wherein said issuing said security into the capital market includes issuing a Guaranteed Investment Contract.
- 28. The method of claim 12, wherein said reinsurance asset trust is managed along the statutory rules on terms of the trust.
- 29. The method of claim 12, further including the step of computer-aided managing said reinsurance asset trust consistent with terms of the trust.
- 30. The method of claim 18, further including, for each of a plurality of time periods, the steps of:

valuing traunches for financial instrument funding of said reinsurance asset trust; calculating relative proportion of each said traunche; and making a corresponding asset adjustment corresponding to said asset of said trust.

31. Apparatus arranged to manage a reinsurance transaction, the apparatus comprising:

a computer system arranged to arranged to manage an insurance reserve requirement by segmenting risk components in a reinsurance transaction, the computer system comprising logic means controlling the system in carrying out the steps of: calculating an insurance reserve requirement from data; and segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components, to support carrying out the reinsurance transaction in which the components are allocated to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement and the assets for the reserve requirement are assigned to a reinsurance asset trust to receive reinsurance credit for said reserve requirement.

- 32. The apparatus of claim 31, wherein said reinsurance transaction provides reinsurance for life insurance, and wherein said logic means controls the system to carry out the step of associating data corresponding to the life insurance with the reinsurance transaction.
- 33. The apparatus of claim 32, wherein said step of segmenting includes: selecting said insured contingency risk from a group including mortality risk, morbidity risk, and survivorship risk.
  - 34. The apparatus of claim 32, wherein said step of calculating includes: calculating a statutory reserve requirement; calculating an economic reserve requirement; and calculating an excess of the statutory over the economic reserve requirement.
- 35. The apparatus of claim 32, wherein said step of segmenting includes: calculating a capital requirement corresponding to an economic reserve; and calculating a capital requirement corresponding to an excess of the statutory reserve over the economic reserve.
- 36. The apparatus of any one of claims 31-32, wherein the step of allocating the components to different parties includes:

allocating the capital requirement to at least one of the parties from a group including a bank, a syndicate, a pension plan, another securities lender, or an investor through the purchase of some of any traunche of a trust funding financial instrument, and wherein said logic means controls the system to carry out the steps of:

associating data corresponding to said source of an asset with the reinsurance transaction; and for each of a plurality of time periods:

calculating the reserve requirement and the capital requirement; and making an asset adjustment corresponding to the asset in the reinsurance asset trust.

37. The apparatus of claim 31, wherein the step of allocating the components to different parties includes funding the capital requirement by issuing a security into the capital market, and said logic means controls the system to carry out the steps of:

associating data corresponding to said security with the reinsurance transaction; and for each of a plurality of time periods:

calculating the reserve requirement and the capital requirement; and making an asset adjustment corresponding to the asset in the reinsurance asset trust.

- 38. The apparatus of claim 37, wherein said step of issuing said security into the capital market includes issuing a Funding Agreement.
- 39. The apparatus of claim 37, wherein said step of issuing said security into the capital market includes issuing a Capital Redemption Bond.
- 40. The apparatus of claim 37, wherein said step of issuing said security into the capital market includes issuing a Guaranteed Investment Contract.
  - 41. The apparatus of any one of claims 38-40, wherein said logic means controls the system to carry out the step of computer-aided managing said security consistent with investment guidelines such that the asset held for said insured contingency risk qualifies as an admitted asset in a jurisdiction of the contingency risk.
  - 42. The apparatus of any one of claims 38-40, wherein said logic means controls the system to carry out the step of associating data corresponding to said security with a corresponding asset from a group including an investment grade bond, a Collateralized Mortgage Obligation, Mortgage Backed Security, real estate, and an equity.

- 43. The apparatus of any one of claims 38-40, wherein said logic means controls the system to carry out the step of computer-aided managing said reinsurance asset trust consistent with terms of the trust.
- 44. The apparatus of claim 41, said logic means controls the system to carry out the step of computer-aided managing said reinsurance asset trust consistent with terms of the trust.
- 45. The apparatus of any one of claims 31-32, wherein the step of allocating the components to different parties, includes allocating said insured contingency risk to at least one of the parties from a group including a reinsurer, a reinsurance pool, a retrocessionaire, a retrocession pool, or another insurance risk assumer, and said logic means controls the system to carry out the steps of:

associating data corresponding to a provider of insurance coverage for said insured contingency risk with the reinsurance transaction; and for each of a plurality of time periods: calculating the reserve requirement and the insured contingency risk; and making an adjustment to the insurance risk coverage.

- 46. The apparatus of any one of claims 31-32, wherein said logic means controls the system to carry out the step of managing, for a reinsurance company, to accommodate change in the insured contingency risk and change in the capital requirement.
- 47. The apparatus of any one of claims 37-40, wherein said logic means controls the system to carry out, for said for said reinsurance asset trust, the step of calculating a value of said asset on a legally required filing date of a financial statement for said reserve requirement.
- 48. The apparatus of any one of claims 31-32, wherein said logic means controls the system to carry out, for each of a plurality of time periods, the steps of: calculating reserve requirement using emerging experience data; and recalculating corresponding values for said insured contingency risk and said capital

recalculating corresponding values for said insured contingency risk and said capital requirement.

49. The apparatus of any one of claims 1-2, wherein said logic means controls the system to carry out, for each of a plurality of time periods, the steps of:

valuing traunches for financial instrument funding of said reinsurance asset trust; calculating relative proportion of each said traunche; and making a corresponding asset adjustment corresponding to said asset of said trust.

50. The apparatus of any one of claims 31-32, wherein said logic means controls the system to carry out, for each of a plurality of time periods, the steps of:

generating a report by inserting datum produced in one of said apparatus steps into the report, said datum from a group including said reserve requirement, said insured contingency risk, said corresponding capital requirement, and a value of said asset; and printing the report.

51. The apparatus of any one of claims 31-32, wherein said logic means controls the system to carry out the steps of:

generating a contract by inserting datum produced in one of said apparatus steps into the contract for said reinsurance transaction to one of the parties from a group including an insurance company, a risk carrier and a source of asset; and printing the contract.

52. The apparatus of any one of claims 31-32, wherein said logic means controls the system to carry out, for each of a plurality of time periods, the step of:

performing a valuation and pricing said insurance contingency risk and said corresponding capital requirement.

53. The apparatus of claim 52, wherein said logic means controls the system to carry out the steps of:

computer-aided managing said reinsurance transaction for a reinsurance company providing collateral for said economic reserve requirement,

said excess reserve requirement funded by one of the parties from a group including a bank, a syndicate, a pension plan, a securities lender, or an investor through the purchase of any portion of any traunche of a trust funding financial instrument; and

further including the step of associating data corresponding to said source of said asset with said reinsurance company.

54. The apparatus of claim 52, wherein the step of allocating the components to different parties further includes funding the capital requirement by issuing a security into the capital market, and wherein said logic means controls the system to carry out the steps of associating said security with the reinsurance transaction, and for each of a plurality of time periods:

calculating the reserve requirement and the capital requirement; and making an asset adjustment corresponding to the asset in the reinsurance asset trust.

- 55. The apparatus of claim 54, wherein said issuing said security into the capital market includes issuing a Funding Agreement.
- 56. The apparatus of claim 54, wherein said issuing said security into the capital market includes issuing a Capital Redemption Bond.
- 57. The apparatus of claim 54, wherein said issuing said security into the capital market includes issuing a Guaranteed Investment Contract.
- 58. The apparatus of claim 52, wherein said reinsurance asset trust is managed along the statutory rules on terms of the trust.
- 59. The apparatus of claim 32, wherein said logic means controls the system to carry out the step of computer-aided managing said reinsurance asset trust consistent with terms of the trust.
- 60. The apparatus of claim 38, wherein said logic means controls the system to carry out, for each of a plurality of time periods, the steps of:

valuing traunches for financial instrument funding of said reinsurance asset trust; calculating relative proportion of each said traunche; and making a corresponding asset adjustment corresponding to said asset of said trust.

61. Apparatus controlling a system, the apparatus including:

means disposed for controlling a computer system carrying out an implementation of managing an insurance reserve requirement by segmenting risk components in a reinsurance transaction, the means controlling cooperation of:

means for calculating an insurance reserve requirement from data;

means for segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components; and

means for computer-aided carrying out the reinsurance transaction by steps including: allocating the components to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement; and

assigning assets for the reserve requirement to a reinsurance asset trust to receive reinsurance credit for said reserve requirement.

62. A computer-readable media tangibly embodying a program of instructions executable by a computer carrying out the step of:

controlling performance of a computer system in carrying out the operations of: calculating an insurance reserve requirement from data;

segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components; and

processing data to carrying out the reinsurance transaction in which the components are allocated to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement and the assets for the reserve requirement are assigned to a reinsurance asset trust to receive reinsurance credit for said reserve requirement, to carry out managing an insurance reserve requirement by segmenting risk components in a reinsurance transaction.

- 63. The media of claim 62, wherein the media comprises at least one of a RAM, a ROM, a disk, an ASIC, and a PROM.
- 64. An electronic transmission apparatus for handling communications to implement a part of insurance reserve requirement by segmenting risk components in a reinsurance transaction, the apparatus including:

in cooperation with means for calculating an insurance reserve requirement from data and means for segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components, in supporting the reinsurance transaction by steps including allocating the components to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement, and assigning assets for the reserve requirement to a reinsurance asset trust to receive reinsurance credit for said reserve requirement, program control means governing generating a data set unique to the reinsurance transaction; and

electronic transmission means for communicating said data set over an Internet network addressed to another computer.

- 65. An electronic transmission apparatus for handling communications to implement a part of insurance reserve requirement by segmenting risk components in a reinsurance transaction, the apparatus including means for calculating an insurance reserve requirement from data and means for segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components, both said means cooperating to produce a unique data set for the reinsurance transaction, said reinsurance transaction carried out by steps including allocating the components to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement, and assigning assets for the reserve requirement to a reinsurance asset trust to receive reinsurance credit for said reserve requirement, said apparatus comprising program control means governing sending the data set via electronic transmission means for communicating said data set over an Internet network addressed to another computer.
- 66. An electronic receiver apparatus for handling communications to implement a part of insurance reserve requirement by segmenting risk components in a reinsurance transaction, the apparatus cooperating with means for calculating an insurance reserve requirement from data and means for segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components, both said means interacting to produce a unique data set for the reinsurance transaction, said reinsurance transaction carried out by steps including allocating the components to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement, and assigning assets for the reserve requirement to a reinsurance asset trust to receive reinsurance credit for said reserve requirement, said apparatus comprising

program control means for receiving the data set via electronic transmission means for communicating said data set over an Internet network.

67. A computer-readable media tangibly embodying a program of instructions executable by a computer carrying out the step of:

controlling performance of a computer system in carrying out the operations of: calculating an insurance reserve requirement from data;

segmenting, for the reserve requirement, an insured contingency risk from a corresponding capital requirement to produce components; and

processing data to carrying out the reinsurance transaction in which the components are allocated to different parties, one of the parties from a group including an insurance risk carrier and a source of an asset for said capital requirement and the assets for the reserve requirement are assigned to a reinsurance asset trust to receive reinsurance credit for said reserve requirement.